Scenario Worksheet

Practice and Scenario Description:

Information Type	Data
Region	Delta States
State	Louisiana
Discipline Group	Agronomy
Practice Code/Name	344 - Residue Management, Seasonal
Scenario ID	1
Scenario Name	Residue Management, Seasonal
Scenario Description	Historically, producers have focused tillage activities in the spring and fall, both immediately before and after the cash crop. Tillage activities have been intensive, and have served to both suppress weeds, reduce insect populations, and prepare fields for both immediate (spring) and subsequent (fall) planting events. These periods of intensive tillage have led to excessive soil loss, often above the Soil Loss Tolerance (T), due to the loss of critical crop or weed residue and have also resulted in a loss of seasonal wildlife cover. The RUSLE2 and/or WEPS models will be used to review the farming operation and determine if enough residue is being retained between planted crops to keep soil loss below T and the appropriate wildlife habitat tools will be used to assess wildlife habitat - where wildlife is an identified concern. The producer will then remove operations, or select alternate operations, to manage residue between planted crops.
Before Practice Situation	Row crops or small grains are grown and harvested. Fields are tilled immediately following harvest, with rows in some fields being hipped for drainage. Residue amounts after harvest average 30% or less, resulting in bare soil being exposed to wind erosion and/or intense rainfall during the fall, winter, and early spring and a poor cover situation for wildlife. Over the winter residue degrades and sediment/nutrient runoff from fields increases. wind and/or water erosion occurs. Spring tillage and seedbed preparation activities occur as early as possible in the late winter and early spring. Weed control is accomplished primarily through tillage, requiring multiple operations. Sediment and nutrient runoff from the fields flows into streams, water courses or other water bodies causing degradation to the receiving waters. Soil health (soil organic matter) declines over time as a result of tillage practices, low residue monocultures, and long periods of bare soil.
After Practice Situation	344 is applied per the practice plan following all the appropriate criteria for the planned purpose(s). No tillage occurs after crop harvest until just prior to planting the next crop. In warmer areas, winter weeds or cover crops grow throughout the winter months. The residue that remains on the soil surface provides soil cover during late fall, throughout the winter, and into the early spring. Runoff and erosion are reduced and and wildlife cover is improved . Wind erosion is reduced by standing residues. Winter weeds or the cover crop is terminated with tillage, a roller-crimper, shredding, with an approved herbicide, or a combination of these methods prior to spring planting as late as feasible. Over time, soil health is improved due to the additional biomass, ground cover, soil infiltration, and plant diversity in the cropping system.
Scenario Feature Measure	Area planted
Scenario Unit	Acre
Scenario Typical Size	40

Cost Summary:

Cost Category	Scenario Cost	Scenario Cost/Unit
Materials	$0.00	$0.00
Equipment/Installation	$0.00	$0.00
Labor	$0.00	$0.00
Mobilization	$0.00	$0.00
Acquisition of Technical Knowledge	$150.27	$3.76
Foregone Income	$0.00	$0.00
Total	$150.27	$3.76

Cost Details:

Cost Category	Component ID	Component Name	Component Description	Unit	Price ($/unit)	Quantity	Cost
Acquisition of Technical Knowledge	294	Training, Workshops	Educational seminar or series of meetings emphasizing interaction and exchange of information among a usually small number of participants.	Each	$116.67	1	$116.67
Acquisition of Technical Knowledge	297	Transportation	Mileage to attend a training conference, workshop, or TSP travel associated with developing Conservation Activity Plan.	Mile	$0.56	60	$33.60